Stephen P. Samuels
Counsel
614.559.7259 (t)
614.464.1737 (f)
ssamuels@fbtlaw.com

June 30, 2022

Debora Shore
Administrator, Region 5
U.S. Environmental Protection Agency
77 West Jackson Blvd
Chicago, IL 60604

Submitted via electronic mail to: Opie.Jodie@epa.gov.

Re: **Euclid NPDES permit OH0031062 Public Hearing Comments**.

Comments of the Maumee Watershed Coalition, Ohio Municipal League, and the County Sanitary Engineers Association of Ohio on Objections by U.S. EPA

Dear Ms. Shore:

These comments are submitted on behalf of the Maumee Watershed Coalition, the Ohio Municipal League, and the County Sanitary Engineers Association of Ohio.

- The Maumee Watershed Coalition is a diverse group of entities that are, or represent the interests of, many cities, counties, businesses, and farmers in the Maumee River Watershed. Members include cities, counties, industry, and agricultural trade associations. The members formed their partnership to protect and advance the economic, environmental, and other interests of their communities and organizations. The Coalition's founding principle is that sound science, economic reality, and environmental justice should be the pillars that guide the efforts to improve water quality in the Western Lake Erie Basin (WLEB). Prior to U.S. EPA's misguided intrusion into Ohio EPA's generally thoughtful approach to solving the problem of excessive nutrients discharging into Lake Erie, the Coalition's efforts had been focused on assisting Ohio EPA in its development of the Maumee River Watershed TMDL.[1]
- The Ohio Municipal League (OML) is a statewide non-profit organization that counts 730 of Ohio's 931 cities and villages as members. On a national basis, the OML is affiliated with the National League of Cities, the International Municipal Lawyers Association, the U.S. Conference of Mayors, and the International City/County Managers Association. The

[1] Because of their different perspectives on what is, on the surface, a predominantly point source issue—an effluent limitation in an NPDES permit—the agricultural trade group members of the Coalition have written separately to articulate their concerns with U.S. EPA's objection to Euclid's draft renewal permit.

OML represents the collective interests of Ohio cities and villages before the Ohio General Assembly and the state elected and administrative offices.

- The County Sanitary Engineers Association of Ohio (CSEAO) consists of the Sanitary Engineers, and their staffs, of all of Ohio's counties. It is an affiliate organization within the Ohio County Commissioners Association. CSEAO's members are primarily responsible for constructing, operating, and managing hundreds of water and wastewater treatment plants and collection/distribution systems in all of Ohio's 88 counties.

Comment 1 –

Many shortcomings in U.S. EPA's rationale have already been identified by others—including the Ohio Manufacturing Association, Ohio EPA, and the Ohio agribusiness trade groups—in their comments on U.S. EPA's 2021 guidance "Water Quality Criteria Recommendations for Lakes and Reservoirs" ("2021 Criteria"), which U.S. EPA relies upon as the primary basis for its objection to Euclid's draft phosphorus limit. The Coalition, OML and CSEAO reviewed the technical comments that Ohio EPA submitted in response to the U.S. EPA's specific objection letter and at the June 8 public hearing. We find Ohio EPA's criticisms of U.S. EPA's data, legal analysis, and protocol well-reasoned.

While it is beyond the scope of these comments for the Coalition, OML and CSEAO to undertake their own separate critique of the 2021 Criteria, it is worth emphasizing the absence of any data from Lake Erie, or from any of the other Great Lakes for that matter, in the development of the 2021 Criteria, much less any attempt to validate or calibrate U.S. EPA's new models in the 2021 Criteria using data from these water bodies.

The significance of the absence of data from Lake Erie and the other Great Lakes cannot be overstated. U.S. EPA's objection to Euclid's draft permit is based on its application of two new stressor-response models that show a correlation (1) between nutrient (total nitrogen and total phosphorus) concentrations and chlorophyll-*a* concentration, and (2) between chlorophyll-*a* concentration and microcystin concentration, using data collected in 2007 and 2012 (but not the data collected in 2017) from inland lakes and reservoirs across the U.S. in the Agency's National Lakes Assessment (NLA) sampling program.

However, when U.S. EPA attempted to validate its two new models using inland lake data taken from two states (Iowa and Missouri), the results showed significant differences between the modeling results with the state data and the results with the NLA data, *even though the state data was part of the NLA database*. *See* Appendices A-C to U.S. EPA's 2021 Criteria. This fact exemplifies the fallacy of using a new model to make water quality-based decisions about lakes or reservoirs whose data was not included in the development of the model. As Ohio EPA explained

in its comments, this weakness is particularly acute when, as here, the ecosystem and water quality processes in Lake Erie are substantially different than most, if not all, of those in the lakes and reservoirs whose data formed the basis for the development of U.S. EPA's model.

We also question the limited microcystin data U.S. EPA used to base its conclusion that the Lake Erie Central Basin Open Water assessment unit is exceeding Ohio EPA's threshold (1.6 ug/l) for attainment of its public water supply designated use. In its specific objection letter, U.S. EPA referred to "several" samples exceeding the threshold, citing Ohio EPA's 2020 Integrated Water Quality Monitoring and Assessment Report, Appendix H-18. But U.S. EPA failed to mention that this data (the "several samples") was limited to two raw water samples cherry-picked from a large data base collected by three public water systems (Lake County, Mentor and Painesville), and that the data was from 2015 and 2017, and thus is at least five years old. U.S. EPA also neglected to note that the 1.6 ug/l microcystin threshold is not a promulgated, health-based standard, but only an unpromulgated, aesthetic-based standard used by Ohio EPA as guidance in applying Ohio's narrative water quality standards to this part of Lake Erie.

It is unreasonable for U.S. EPA to insist that the citizens of Euclid pay an exorbitant sewer bill in an effort to meet impossibly stringent phosphorus limits based on nothing more than limited, outdated microcystin monitoring data and an unpromulgated standard designed only to address aesthetics.

Other limitations with the 2021 Criteria were acknowledged, but inexplicably given no weight, by U.S. EPA. In its August 2021 response to comments on the draft Criteria, the Agency stated: "The criterion models were developed using NLA data, and therefore, may be limited in applicability to the types of lakes sampled by NLA. For example, the Great Lakes and tidally influenced lakes were not included in the population sampled by the NLA." *See* 2021 Criteria at p. 62. The microcystin-chlorophyll-*a* model that U.S. EPA developed in its 2021 Criteria allows for consideration of dissolved reactive phosphorus (DRP) data. However, despite the fact that the problems in Lake Erie are largely a function of DRP, U.S. EPA did not consider any DRP data, just total phosphorus data, in reaching its conclusion that Euclid's phosphorus limit needed to be almost a thousandfold more stringent than the current limit.

As U.S. EPA knows, temperature, sunlight, stagnation, and DO stratification are all factors that can cause a short-term spike in microcystin concentration, even when nutrient concentrations are relatively low (or even below promulgated standards). The science relied on for the establishment of the Great Lakes Water Quality Agreement's (GLWQA) 40 percent nutrient loading reduction targets included the impact of these factors, as well as that of DRP, on the creation of HABs.

Ohio EPA does not mandate technically problematic, legally suspect, and prohibitively costly phosphorus reductions on publicly owned treatment works (POTWs) discharging into the Lake Erie basin based on such limited, incomplete, and outdated water quality data. Neither should U.S. EPA.

Comment 2 –

We understand from the June 8 public hearing that U.S. EPA offered to withdraw its objection to the phosphorus limit in Euclid's permit if Ohio EPA would agree to impose a 0.5 mg/l TP limit in Euclid's permit and (presumably) the same limit on all (major) POTWs discharging into the Lake Erie Basin. Such coercion is unlawful. U.S. EPA cannot threaten to impose a technically infeasible (if not impossible) nutrient limit in order to leverage Euclid and other Lake Erie POTWs into accepting a less draconian outcome. For U.S. EPA to lawfully impose a 0.007 mg/l limit (or any phosphorus limit, for that matter), the Agency must employ the same "reasonable potential" analysis that Ohio EPA employs when it imposes WQBELs in NPDES permits. And if U.S. EPA wants to impose such limits as part of its oversight authority over state-issued permits, U.S. EPA must follow the procedures required by the Clean Water Act and implementing rules, as well as 5 U.S.C. Part 553, which provide the public with an opportunity to comment on the proposed limit.

The issues associated with the impacts of nutrients on the Western and Central Basins of Lake Erie, and what should be done about them, encompass a broad range of scientific, technical, economic, and logistical issues, and a panoply of stakeholders: not just U.S. EPA, Ohio EPA and the City of Euclid, but also Canada, other Great Lakes states, hundreds of cities and counties and their tens of millions of residents, scores of businesses, hundreds of thousands of farmers, recreational and other beneficiaries of the Lake, and others.

The signatories to this letter are, or represent, many of these stakeholders. And what we say is that these issues are far broader than and, realistically, outside the scope of, Euclid's permit and, indeed, the NPDES program. We, and the many other stakeholders, have the right to meaningfully participate in a detailed and comprehensive discussion about the myriad issues and the proper path forward. This is a process that Ohio EPA, with guidance from U.S. EPA, has pursued and is implementing in developing the Maumee River Watershed TMDL, which will be Ohio's first far-field TMDL.

Ohio EPA's process is the same as that which was employed in the development of the Chesapeake Bay TMDL, albeit on a smaller scale. That TMDL required more than a decade of detailed technical, financial, and policy discussions among the stakeholders. That is how major policy changes should be implemented, not utilizing Region 5's oversight authority in the context of an individual NPDES permit renewal, a heavy-handed process that does not consider, much less knowledgeably and fairly evaluate, the impacts of the Agency's actions on tens of millions of stakeholders, whose input has not even been solicited.

Comment 3 –

U.S. EPA is disregarding Ohio's primary role in developing water quality standards. U.S. EPA's 2021 Criteria state that "*EPA's recommended water quality criteria are not regulations and do not constitute legally binding requirements. States…may adopt other scientifically defensible water quality criteria that differ from these recommendations*." States are permitted "*the flexibility to do this by adopting criteria based on (1) EPA's recommended criteria, (2) EPA's criteria modified to reflect site-specific conditions, or (3) other scientifically defensible methods*." *See* 2021 Criteria at p. ix. Consistent with Annex 4 of the GLWQA, and as articulated in Ohio EPA's written response to the specific objection letter and its comments at the June 8 hearing, Ohio EPA has developed "scientifically defensible methods" to address nutrient pollution in the Western and Central Basins of Lake Erie. U.S. EPA should respect Ohio EPA's methods.

At a minimum, U.S. EPA must abide by its own policies and guidance. It has been U.S. EPA's longstanding policy that new or modified recommended water quality criteria are not effective in a state until that state does not adopt or modify the criteria and fails to explain why its criteria are sufficiently protective and scientifically defensible, *as part of the state's next triennial water quality standards review*. *See* U.S. EPA's 2014 Water Quality Standards Handbook, Chapter 6. In U.S. EPA's 2021 Criteria, U.S. EPA states that its new models are nonregulatory, only recommendations, but it expects states to give the models full consideration *during their next triennial WQS review*, at which time states can adopt or modify the recommended models or provide an explanation why their criteria are sufficiently protective and scientifically defensible. *See* 2021 Criteria at p. ix.

Ohio EPA completed its last triennial review in 2020; its next scheduled one will occur in 2023. Accordingly, USEPA must withdraw its objection to Euclid's permit, and afford Ohio EPA the same deference given to all other delegated states – a full and fair opportunity to evaluate U.S. EPA's August 2021 nutrient models for inland lakes and reservoirs as part of Ohio EPA's upcoming triennial WQS review.

Comment 4 –

An argument that U.S. EPA has advanced to support the stringent phosphorus limit for Euclid is the bromide that "regulation breeds innovation." Although the statement undoubtedly contains a kernel of truth, applying it in this situation, divorced from a full analysis of the potential consequences, is a recipe for disaster.

How quickly will new technologies become available? What is the likely cost? What will regulated cities like Euclid do in the interim? What sacrifices will cities be forced to make—in safety and other municipal services, economic development, etc.? Will the residents of the affected

cities, particularly those on the lower end of the economic ladder, be able to afford unknown, but certainly gargantuan, rate increases? What will happen to them? U.S. EPA's action is particularly troubling as it directly contradicts its obligation to evaluate the potential environmental justice implications of its actions.

Comment 5 –

In its specific objection letter, U.S. EPA suggests that water quality trading is the solution that will buffer the harsh impacts of the Agency's proposed phosphorus limit. However, because the relative contribution of total phosphorus from point sources is but a tiny fraction of the total loading to Lake Erie, ratcheting down on them will not effect a material reduction. Thus, offering water quality trading as a solution would essentially force point sources to underwrite the cost of non-point source reductions under the guise of forced trading.

While no one doubts that trading can be a useful tool under appropriate circumstances, in the absence of a comprehensive, granular assessment of the opportunities, benefits and costs of trading —which has not been done—it is naïve at best to posit trading as the way Euclid (and the scores of other POTWs discharging into Lake Erie) can meet stringent phosphorus limitations. What trading opportunities exist in fact? How would non-point source discharges be controlled in such trading program? What is the cost to point sources of buying the level of credits that would be required to achieve the "necessary" non-point source reductions? None of these questions, and a hundred other pertinent ones, has a generic answer. It depends on the nature, size, location, and numerous other attributes of the non-point sources in question. If U.S. EPA knows the answer to these questions in the Lake Erie watershed, it is past time to share the information. The design, economics, and success/failure of a trading program depends on high quality detailed data. The signatories to these comments believe that development and analysis of, and the decision-making based on such data, is more appropriately (from a legal and policy-making perspective) undertaken in a formal rulemaking process. Patently, these issues are far outside the scope of an individual NPDES permit renewal.

Comment 6-

All of this leads to the conclusion that the many important issues created by U.S. EPA's objection to Euclid's permit should be discussed and resolved under state leadership in the context of a TMDL (or other state protocols), and that is exactly what is occurring in the Western Basin of Lake Erie. There, despite being under enormous—and, in our view, undue—time pressure, Ohio EPA has undertaken a yeoman effort to gather and analyze massive amounts of information in order to develop a sensible, workable, and affordable nutrient reduction strategy that will be largely

implemented via a load allocation for both the point sources and non-point sources in the watershed.

Moreover, recognizing the limitations of time and resources and, most of all, data—critical information about the genesis, transport, fate and impact of phosphorus in all its forms continues to pour in—Ohio EPA has made the laudable decision to incorporate adaptive management as a key element of the Maumee River Watershed TMDL, thus ensuring that it is a living document that can, and will, be modified as its implementation plan moves forward.

Much less is known about the nutrient processes in the Central Basin than in the Western Basin. Ohio EPA and many leading scientists have concluded that nutrients originating in the Western Basin are a major, if not the primary, source of the nutrients entering the Central. For this reason, there is a sound basis for concluding that the implementation of the upcoming Maumee River Watershed TMDL will have a substantial remedial effect on nutrient loadings entering the Central Basin. Thus, before any NPDES permit-related actions are taken with respect to Central Basin permitholders, U.S. EPA should let the Maumee River Watershed TMDL process be completed, and a reasonable time allotted to enable the implementation plan to achieve its objectives. The Coalition, OML, and CSEAO urge both regulatory agencies to work together to develop that TMDL, rather than engaging in a wasteful dispute over the phosphorus limit for a small, financially strapped Central Basin municipality whose loadings are so small that reducing them to zero will not move the "nutrient water quality needle" one iota in Lake Erie.

Thank you for your consideration of these comments.

Sincerely,

/s/ Stephen P. Samuels

SPS:gpd